

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER :			
Misidentified ☐	☐	Past Due ☐	☐				

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START TIME: 9:10 OVEN TEMPERATURE: _____
 322 FINISH TIME: 9:40

FINISH TIME: 9:40

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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 152277

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152277

Page 3

Item ID: D2858-2

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Hinge Bracket

Start Date: 10/7/2016 Start Qty: 24.00

24

Cust Item ID:

Required Date: 10/21/2016 Req'd Qty: 24.00

24

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
160									
QC	Memo	0.04				(24)			DAS 38 9-89 NOV 15 2016
Quality Control									
170	Identify as per dwg & Stock Location: <u>Stoba</u>	0.00							
170									
Packaging	Memo	0.04				24			DAS 6 9-89 NOV 18 2016
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.40							DAS 21 9-89 NOV 18 2016
Quality Control									
									DAS 21 9-89 NOV 18 2016

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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : _____									

Picklist Print

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Page 1

Work Order ID: 152277

152277

Parent Item: D2858-2

D2858-2

Parent Item Name: Hinge Bracket

Start Date: 10/7/2016

Required Date: 10/21/2016

Start Qty: 24.00

Required Qty: 24.00

Comments: IPP C00.06.22Removed P/O for powder coatEC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.500X01.25 0		Purchased	No			110	f	5.9480	0.163	4.117894			

M6061T6B1 500X01 250

6061-T6 Bar 1.50 x 1.25

DAS
44
9-89

16-11-10

Location

Loc Qty

Loc Code

MAT003

5.948

m134158

5.948

4,198

DQA: _____ Date: _____



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		OTHER :			

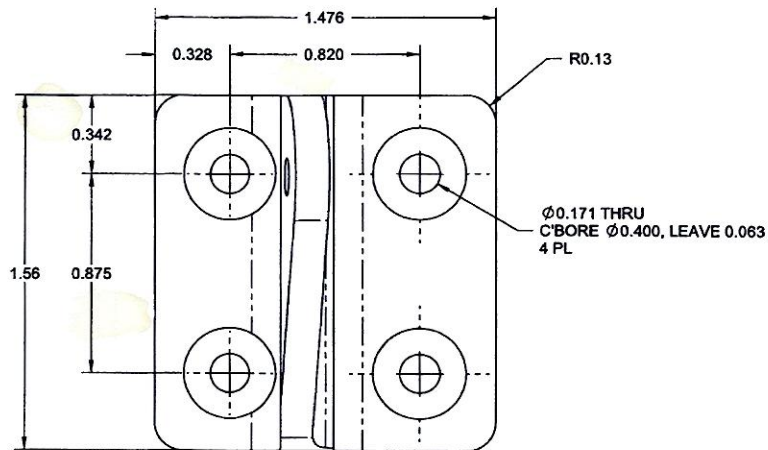
DART AEROSPACE LTD		Work Order: 152277
Description: Hinge Bracket		Part Number: D2858-2
Inspection Dwg: D2858	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

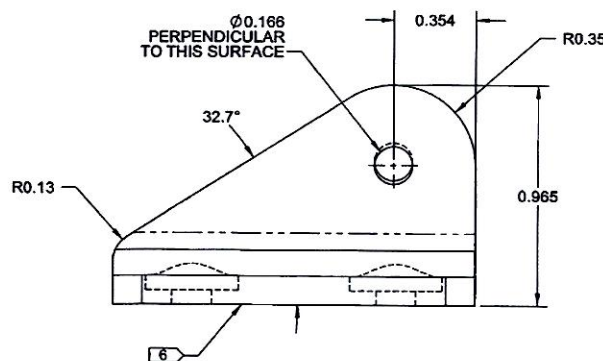
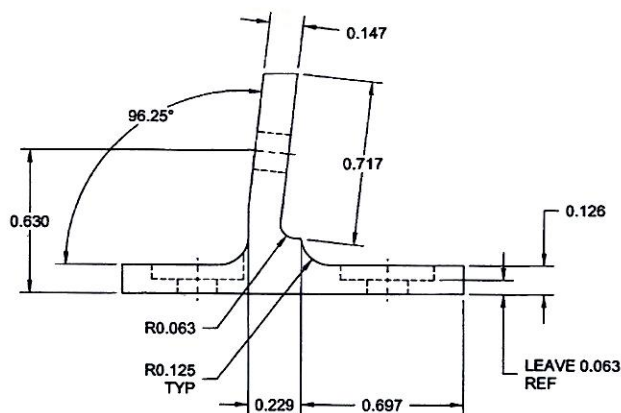
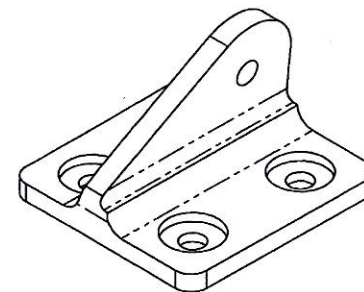
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.171	+0.005/-0.000	0.172	✓		caliper	OK
Ø0.400	+0.005/-0.000	0.400	✓		"	"
R0.125	+/-0.010	0.125	✓		rad G	Shop
0.328	+/-0.010	0.326	✓		caliper	OK
0.820	+/-0.005	0.819	✓		"	"
1.476	+/-0.010	1.475	✓		"	"
0.342	+/-0.010	0.341	✓		"	"
0.875	+/-0.010	0.874	✓		"	"
1.56	+/-0.030	1.561	✓		"	"
0.147	+/-0.010	0.147	✓		"	"
0.717	+/-0.010	0.715	✓		"	"
0.697	+/-0.010	0.693	✓		HG	Block
0.229	+/-0.010	0.229	✓		caliper	OK
R0.125	+/-0.010	0.125	✓		rad G	Shop
R0.063	+/-0.010	0.0625	✓		"	"
0.063	+/-0.010	0.063	✓		micr	OK
0.126	+/-0.010	0.127	✓		"	"
0.630	+/-0.010	0.627	✓		caliper	OK
R0.354	+/-0.010	0.354	✓		rad G	Shop
0.965	+/-0.010	0.965	✓		caliper	OK
Ø0.166	+0.005/-0.000	0.167	✓		"	"

Measured by: DAS 45 9-89	Audited by: [Signature]	Preliminary Approval:
Date: 11/11/12	Date: 11/11/13	Date:

Rev	Date	Change	Revised by	Approved
A	04.11.11	New Issue	KJ/JLM	[Signature]
B	11.11.07	Dwg Rev updated	KJ	[Signature]



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 152277MLJ
161026



D2858-2 HINGE BRACKET

NOTES:

- 1) MATERIAL: 6061-T6 ALUMINUM PER QQ-A-225/8 OR QQ-A-200/8 OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T68
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: DART P/N "D2858-2" PER DART QSI 044 6.1
- 7) WEIGHT: 0.04 lbs



DESIGN	KE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	gp	DRAWING NO. D2858	REV. C SHEET 2 OF 2
CHECKED		TITLE HINGE BRACKET	SCALE NTS
MFG. APPR.		COPYRIGHT © 1998 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
APPROVED		DATE 10.10.12	
DE APPR.			

RELEASED
2010-11-26